

113 of Figure 5C shows that the spectral noise density level increases (primarily due to quantization noise of the delta-sigma converter) as the frequency increases, except for $1/f$ increase near zero frequency. As a result, the noise level within the bandwidth of signal energy 110 is greater than that for signal energies 106 or 108. In this embodiment, the decimation filter 66 is implemented with low pass filtering and equivalent bandpass filtering is implemented in the following matched filter.

REMARKS

The Applicant thanks the Examiner for the constructive interview which was courteously granted on April 25, 2002. The rejections under 35 USC 112 were discussed during the interview.

In the interview, with regard to 35 USC 112 rejection of claim 1, we brought to the attention of the Examiner the passage of the specification on page 10, line 8 of the specification which clearly mentions that the commutator translates the waveform down to D.C. centered frequency. Accordingly, the Examiner agreed to withdraw the 35 USC 112 rejection for claim 1. Thus, claim 1 is now allowable. Since claims 2-6 are dependent on claim 1, they are also allowable.

Concerning claim 13, the Examiner is authorized to cancel this claim by Examiner's Amendment at the time a Notice of Allowance is sent.

We wish to thank the Examiner for the courteous telephone interview which was helpful in resolving the issues in this application.

In the event that the application is not considered to be entirely in condition for allowance, applicant's attorney would appreciate an interview with the Examiner to discuss the application. Applicant's attorney would prefer a personal interview with the Examiner, but the time and cost of travel from the Los Angeles location of our offices makes this impractical. Thank you in advance for the courtesy of an interview if this case is not now considered to be allowable.